

ATLAS BALL & BEARING CO LIMITED

ELGILOY BALL DATA SHEET

Attributes

Cobalt- Chromium- Nickel alloy gives a combination of high strength, ductility and good mechanical properties and is age hardenable. Elgiloy also has excellent fatigue life, corrosion resistance in numerous environments and is non-magnetic

Specification with equivalents

Elgiloy®
Phynox®
UNS R30003
DIN 2.4711

Chemical Analysis %

Ni	14.0-17.0	Mn	1.50-2.50
Mo	6.0-8.0	C	0.15 max
Cr	19.0-21.0	Be	0.10 max
Co	39.0-41.0	P	0.15 max
Si	1.20 max	Fe	Bal
S	0.015 max		

Typical uses/applications

Safety Valves, pressure relief valves

Mechanical/physical properties

Hardness	350 - 460 Hv
Tensile strength	1400-1900 Mpa
Approx service temperature	-185 to +450° C
Specific gravity (density)	8.30 g/cm ³ (0.300 lb/in ³)
Melting point	1427° C
Coefficient of Expansion	12.5µm/m·°C (20-100°C)
Modulus of rigidity	77 kN/mm ²
Modulus of elasticity	203.4 kN/mm ²
Poissons ratio	0.226

Corrosion data

Available on application

www.atlasball.co.uk

Elgiloy is a trade name of Elgiloy Specialty Metals

Phynox is a trade name of Imphny UGINE Precision

Whilst every care has been taken we cannot accept liability for any errors contained within this data sheet.

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